Aerospace series - Nut, self-locking, bi-hexagonal (double reduced), in heat resisting nickel base alloy - NI-P101HT (Waspaloy), silver plated, Classification: 1 210 MPa/730 °C

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 3637:2023 sisaldab Euroopa standardi EN 3637:2023 ingliskeelset teksti.	This Estonian standard EVS-EN 3637:2023 consists of the English text of the European standard EN 3637:2023.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 19.07.2023.	Date of Availability of the European standard is 19.07.2023.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 49.030.30

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3637

July 2023

ICS 49.030.30

Supersedes EN 3637:2008

English Version

Aerospace series - Nut, self-locking, bi-hexagonal (double reduced), in heat resisting nickel base alloy - NI-P101HT (Waspaloy), silver plated, Classification: 1 210 MPa/730 °C

Série aérospatiale - Écrou bihexagonal, à freinage interne (double réduit), en alliage résistant à chaud base nickel NI-P101HT (Waspaloy), argenté - Classification : 1 210 MPa/730 °C

Luft- und Raumfahrt - Zwölfkantmutter, selbstsichernd (Doppelt reduziert), aus hochwarmfester Nickelbasislegierung - NI-P101HT (Waspaloy), versilbert, Klasse: 1 210 MPa/730 °C

This European Standard was approved by CEN on 12 June 2023.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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Contents

Page

European foreword

This document (EN 3637:2023) has been prepared by the Aerospace and Defence Industries Association of Europe — Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2024, and conflicting national standards shall be withdrawn at the latest by January 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 3637:2008.

EN 3637:2023 includes the following significant technical changes with respect to EN 3637:2008:

— Clause 3 „Terms and definitions“ added;

— Key and footnotes to Figure 1 updated;

— Clause 7 modified;

— Bibliography updated;

— document editorially revised.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies the dimensions of self-locking, silver-coated bi-hexagonal nuts with MJ-thread in heat resisting nickel base alloy NI-P101HT for aerospace applications.

Maximum test temperature of the material 730 °C.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2424, *Aerospace series — Marking of aerospace products*

EN 2786, *Aerospace series — Electrolytic silver plating of fasteners*

EN 2959, *Aerospace series — Heat resisting alloy NI-PH1302 (NiCr20Co13Mo4Ti3Al) — Solution treated and cold worked — Bar for forged fasteners — 3 mm ≤ D ≤ 30 mm*

EN 3005, *Aerospace series — Nuts, self-locking, MJ threads, in heat resisting nickel base alloy NI-PH1302 (Waspaloy), silver plated or uncoated — Classification: 1 210 MPa (at ambient temperature)/730 °C — Technical specification*

EN 3220, *Aerospace series — Heat resisting nickel base alloy (Ni-P101HT) — Cold worked and softened — Bar and wire for continuous forging or extrusion for fasteners — 3 mm ≤ D ≤ 30 mm*

ISO 4095, *Aerospace — Bihexagonal drives — Wrenching configuration — Metric series*

ISO 5855-1, *Aerospace — MJ threads — Part 1: General requirements*

ISO 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Requirements

4.1 Configuration – dimensions – tolerances

Configuration shall be in accordance with Figure 1; dimensions, tolerances and masses shall conform with Figure 1 and Table 1. Details of form, not stated, are at the manufacturer's option. Dimensions are after coating.

4.2 Material

Material shall be heat resisting nickel base alloy NI-P101HT to EN 2959 or EN 3220.